

ABSTRACT

METHOD AND APPARATUS FOR AN X-DSL MODEM SUPPORTING MULTIPLE X-DSL LINE CODES

5 A method and apparatus for an X-DSL modem supporting multiple X-DSL line codes, protocols for a plurality of channels is disclosed. Each channel is packetized and each packet includes control information for controlling the performance of the components/modules on the transmit and receive path. Further flexibility is derived from an architecture which incorporates discrete and shared modules on the transmit path and the
10 receive path. The transmit path and receive path modules are collectively controlled by control information in selected ones of the packets. This control information is used by selected ones of the modules to appropriately process each channel in conformance with the corresponding X-DSL protocol, operating on each channel's packets at an appropriate rate, and protocol for the channel. The DSP exhibits a favorable form factor, and flexibility as to
15 protocols and line codes, and numbers of channels supported.